



Effective Health Care

Rigvir Cancer Virotherapy

Results of Topic Selection Process & Next Steps

The nominator is interested in a study of Rigvir cancer virotherapy, a cancer treatment containing an ECHO-7 virus which is not currently FDA-approved or available in the US. Research on this intervention is beyond the purview of AHRQ's Effective Health Care Program, which is focused on developing evidence reviews to inform healthcare decision-making about interventions and activities available to decisionmakers in the United States. No further activity will be undertaken on this topic.

Topic Brief

Topic Name: Rigvir Cancer Virotherapy **Topic #:** 0727

Nomination Date: 11/15/2016

Topic Brief Date: 2/28/2017

Nominator: Individual

Summary of Nomination: The nominator appears to be interested in a systematic review on Rigvir cancer virotherapy to determine its effectiveness and harms. The nominator indicates that Rigvir cancer virotherapy is being used in the European Union for multiple types of cancer with minimal side effects.

Proposed Key Questions: None provided.

Background and Clinical Context: Per the Centers for Disease Control and Prevention, a total of 1,559,130 new invasive cancers were diagnosed in 2013 in the US for an annual incidence of 479 per 100,000 males and 413 per 100,000 females.¹ Traditional cancer treatment usually involves a combination of surgery, chemotherapy, and radiation. Rigvir virotherapy is a type of oncolytic virotherapy, which is a new form of cancer treatment. Rigvir is a live ECHO-7 virus which is not genetically modified.² Oncolytic virotherapy uses a virus to break down cancer cells while protecting healthy cells and may improve the elimination of tumor cells by chemotherapy and radiation.³ Currently Rigvir virotherapy is not FDA- approved and not available in the US. It is used in Latvia, Georgia and Armenia.² Another oncolytic virotherapy, talimogene laherparepvec (T-VEC), was approved in the US in 2015 to treat advanced melanoma.⁴

Selection Criteria Summary

Selection Criteria	Supporting Data
1. Appropriateness	
1a. Does the nomination represent a health care drug, intervention, device, technology, or health care system/setting available (or soon to be available) in the U.S.?	No, this nomination does not represent a healthcare intervention available in the US.
1b. Is the nomination a request for a systematic review?	This nomination is not an explicit request for a systematic review.
1c. Is the focus on effectiveness or comparative effectiveness?	Yes, this nomination does focus on effectiveness.

1d. Is the nomination focus supported by a logic model or biologic plausibility? Is it consistent or coherent with what is known about the topic?	Yes, this nomination focus is supported by a biologic plausibility.
2. Importance	
2a. Represents a significant disease burden; large proportion of the population	This topic represents a large proportion of the population.
2b. Is of high public interest; affects health care decision making, outcomes, or costs for a large proportion of the US population or for a vulnerable population	This topic could affect health care decision making for a large proportion of the US population.
2c. Represents important uncertainty for decision makers	Yes, this topic does represent an important uncertainty for decision makers.
2d. Incorporates issues around both clinical benefits and potential clinical harms	This nomination does address harms.
2e. Represents high costs due to common use, high unit costs, or high associated costs to consumers, to patients, to health care systems, or to payers	This nomination represents a high cost to healthcare systems.

References

1. Invasive Cancer Incidence and Survival — United States, 2013. Morbidity & Mortality Weekly Report. January 27, 2017 / 66(3);69–75. Internet: <https://www.cdc.gov/mmwr/volumes/66/wr/mm6603a1.htm#suggestedcitation>
2. Rigvir: First Oncolytic Virotherapy. 2017. Internet: <http://rigvir.com/> Accessed on February 14, 2017.
3. National Cancer Institute Dictionary of Cancer Terms. 2017. Internet: <https://www.cancer.gov/publications/dictionaries/cancer-terms?cdrid=457964>
4. Ledford H. Cancer-fighting viruses win approval. Nature 2015;526:622–3.